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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,367	09/26/2001	Jarmo Heinonen	874.0101.U1(US)	2260

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EXAMINER

RAMAKRISHNAIAH, MELUR

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/964,367	Applicant(s) HEINONEN ET AL.	
	Examiner Melur Ramakrishnaiah	Art Unit 2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-21 is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-13 is/are rejected.
- 7) ☒ Claim(s) 7 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1-9-02/9-27-03</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA (Applicant's Admitted Prior Art) in view of Lee et al. (US 2001/0029172, filed 12-28-2000, hereinafter Lee).

Regarding claim 1, AAPA discloses an oscillator circuit for use in a local oscillator of an RF communication device that communicates over an RF channel comprising: an oscillator circuit coupled to power supply voltage (V_{cc}) through a buffer transistor and a biasing network having a bias voltage output coupled to the oscillator transistor and to control input of the buffer transistor, the bias network voltage network being coupled to V_{cc} (fig. 1 of Applicant's drawing).

AAPA differs from claims 1-3 in that it does not teach the following: circuitry for setting a magnitude of V_{cc} as a function of at least RF channel conditions or an operational mode of the RF communication device, RF channel conditions are determined by calculating a signal-to-noise ratio, magnitude of V_{cc} is set between about zero volts and some maximum value.

However, Lee discloses low noise amplifier for mobile communication terminal which teaches the following: circuitry (330, fig. 1) for setting a magnitude of V_{cc} (reads on bias circuit varying bias current) as a function of at least RF channel conditions or an

Art Unit: 2643

operational mode of the RF communication device, RF channel conditions are determined by calculating a signal-to-noise ratio, magnitude of V_{cc} is set between about zero volts and some maximum value (fig. 1, paragraphs: 0013, 0024, 0026-0027).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify AAPA to provide for the following: circuitry for setting a magnitude of V_{cc} as a function of at least RF channel conditions or an operational mode of the RF communication device, RF channel conditions are determined by calculating a signal-to-noise ratio, magnitude of V_{cc} is set between about zero volts and some maximum value as this arrangement would facilitate to minimize the use of battery in mobile communication device as taught by Lee (paragraph: 0034), thus facilitating to increase battery life in mobile communication device.

AAPA differs from claims 4-6 in that it does not teach the following: operational mode is one of a TDMA mode or CDMA mode, operational mode is one of burst transmission mode and reception mode or substantially continuous transmission mode and reception mode, operational mode is one of a narrow bandwidth mode or wider bandwidth mode.

However, Lee teaches the following: operational mode is one of a TDMA mode or CDMA mode, operational mode is one of burst transmission mode and reception mode or substantially continuous transmission mode and reception mode, operational mode is one of a narrow bandwidth mode or wider bandwidth mode (paragraphs: 0021-0023).

Art Unit: 2643

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify AAPA to provide for the following: operational mode is one of a TDMA mode or CDMA mode, operational mode is one of burst transmission mode and reception mode or substantially continuous transmission mode and reception mode, operational mode is one of a narrow bandwidth mode or wider bandwidth mode as this arrangement would facilitate to provide mobile communications to the user as is well known in the art.

Claims 8-10 are rejected for the same reasons as set forth in the rejection of claims 1-3.

Claims 11-13 are rejected for the same reasons as set forth in the rejection of claims 4-6.

3. Claims 7 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


4. Claims 15-21 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melur Ramakrishnaiah whose telephone number is (571)272-8098. The examiner can normally be reached on 9 Hr schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curt Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2643

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Melur Ramakrishnaiah
Primary Examiner
Art Unit 2643